FOR IMMEDIATE RELEASE

Contact:Cynthia Chu
AVANTE International Technology, Inc.
70 Washington Road, Princeton Junction
New Jersey, 08550, USA
Tel: (609) 799-8896avante@aitechnology.com
Fax: (609) 799-9308

<u>First true pixel-based Optical Mark-Sense Voting</u> <u>System Achieved 0% Error Rate in 1.5 Million Votes To</u> <u>Receive the First 2002 NASED Certification Based on</u> <u>Federal Voting Standard</u>

Traditional paper ballots are scanned with "discrete sensor" technology much like the SAT tests taken by students. Paper fed in the right way and straight within the target reading line will they be scanned and read correctly. According to a sobering review by Professor Doug Jones in a testimony before the US House of Representatives' Committee on Science on May 22, 2001, the typical error rate is 1 in 6000 to more than 1 in 1000 in his own experience as testing expert for the various voting optical marksense systems. This is dramatically lower than the FEC requirements of 1 in 1,000,000 votes based on 1990 standard and slightly over 1,500,000 votes based on 2002 standard.

While the discrete sensor-based optical scan systems are fine for testing students that may include their ability to fill in the ovals or square completely and correctly, they are not as user-friendly for voters that may not be familiar with taken tests. A lesser amount of marking on designated ovals or squares or markings with pen rather than pencil may mean losing your votes because the reading system simply may not register that there is a marking. There is no easy way to assess the voter intent after the ballots have been scanned.

To the discrete-sensor voting system, there are ballots that have sufficient volume of markings and there are ballots that do not have sufficient volume markings. The only way to assess if lesser markings were made by voters to indicate their intent to vote for any particular candidate can only be done by manual inspections of the ballots.

Yet, paper ballot is a key ingredient in the mix of voting methods that are used to accommodate the absentee voters. In some cases, it is the chosen method by most voters in some States. However, it is also well known that paper ballots can sometimes lead to more voter intent errors both by voters as well as by the counting method and technology.

AVANTE has overcome this paper balloting problem of voter intent with the pixel-based document imaging technology. For the first time, the OPTICAL VOTE-TRAKKER[™] system has exceeded the FEC 2002 standard of less than 1 error in over 1,500,000 votes. With the use of pixel-based technology, instead of simply setting a threshold of light reflection in some discrete area, a full picture of the ballot is taken. All markings with different pixel volume of filled ballots are recorded. By evaluating the difference between

ballots with 10% filled verses 50% filled can help to find any voter intents that may have been missed by the pre-set standard of acceptance.

Another important feature is that any ballots that contain either over-votes or under-votes can be printed out as pictures (ballot images) for manual deciphering and inspection. That is, the counting machines do not have to stop whenever an over-voted or under-voted ballot is encountered.

Not relying on the paper alignment means lesser error because of the paper misalignment during feeding of ballots. It also reduces the cost of using "precision-cut" paper with heavy bond and replaced with standard copying paper. Instead, OPTICAL VOTE-TRAKKER[™] uses fiducial markers to help distinguish the orientations. It will self-aligned any ballots that are not fed correctly.

With the fiducial markers, OPTICAL VOTE-TRAKKER[™] is also able to "scale" any paper shrinkage by moisture and handling. This function helps to reduce the need to use replacement ballots that must be filled in by the voting officials.

OPTICAL VOTE-TRAKKER[™] also incorporates machine-readable unique and randomly generated ballot identifier to authenticate each and every ballot. No duplicate ballots can ever be used or fed into the system. This unique feature eliminates both unintentional human errors and intentional tampering.

The randomly generated unique ballot-identifier not only preserves voter privacy but also allows the ballots to be faxed in by overseas voters. The ballots can be authenticated without doubt. Special receiving terminals can be set-up as not to print out the affidavit pages with voter signature but print out ballot images of the completed ballots. This technology has the potential to solve the problem of mailing in absentee ballots from overseas absentee and military voters.

AVANTE International Technology, Inc. is a new force in the voting industry located in Princeton, New Jersey. It pioneered the use of voter verifiable paper audit trail (VVPAT) for touch-screen voting system (VOTE-TRAKKER[™]) in March 2001. VVPAT based voting system has since become a nationally accepted gold standard for a trustworthy electronic voting system. AVANTE is currently working on an accessible version of the OPTICAL VOTE-TRAKKER[™] to assist the blind voters and voters with other disabilities to vote independently. This accessible optical paper ballot system will be available in early July of 2004.

For more information on this EAC certified optical scanning paper balloting and voting technology (NASED# N1-12-22-11-001 is based on FEC2002 voting system standard), please visit <u>www.vote-trakker.com</u> or call 609-799-8896.

| ccal Impact: State cost of about \$26.2 billion over years to pay off both the principal (\$13.05 lion) and interest (\$13.15 billion) costs on the nds. Payments of about \$873 million per year. E\$ | 5. BT | |
|--|--|--|
| sip Contest | | |
| CAL-VOTE-TRAKKER ^T try to provide ranked w election voter intent co arative tallies at differe For example, 10% vs. andard setting of say 2 | ™ is t votin nse" \ ompa ent p 5. 50% 20%. | the first in the voting og for "instant run-off" voting system permits arison by providing percentage of filled & and in comparison t |
| 1/2 | | |
| | AL-VOTE-TRAKKER ry to provide ranked ixel-based "mark-ser lection voter intent c arative tallies at differ For example, 10% vs andard setting of say | AL-VOTE-TRAKKER [™] is ry to provide ranked votin ixel-based "mark-sense" lection voter intent compa arative tallies at different p For example, 10% vs. 50% andard setting of say 20%. |

Ballot Generation program of OPTICAL VOTE-TRAKKER[™] is fully integrated with the DRE VOTE-TRAKKER[™]. The paper ballots can be immediately reviewed on the screen before it is printed. Printing can be done in-house with laser printer or authorized printing companies. Last minute changes or court orders can be implemented up to the day election.

| W Microsoft Word - General Election Demo Ballot0002E00Full (Previ | ew) | | _ 8 × |
|---|---|---|----------|
| Eile Edit View Insert Format Iools Table Window Help | | | |
| 🞒 🕵 🖬 🔛 100% ▾ 🎼 🛱 🔲 ⊆lose 💘 | | | |
| L | 3 4 5 . | ••••••••••••••• | _ |
| Governor | Secretary of State | Attorney General | |
| . Vote for 1 | Vote for 1 | Vote for 1 | |
| ·PETER MIGUEL CAMEJO | 18 KEITH OLBERG | 42 BILL LOCKYER | |
| Green, Financial Investment Advisor | Republican, Businessman | Democratic, California Attorney General | |
| CARY DAVID COPELAND | 19 KEVIN SHELLEY | 43 GLEN FREEMAN MOWRER | |
| Libertarian Chief Exemptive Officer | 20 VALLI SHAPPE CEISLEP | 44 FD KUWATCH | |
| | 20 VALID SHART E-GEISDER | Libertarian Criminal Defense Attorney | _ |
| 3 BILL SIMON | 21 LARRY SHOUP | 45 DICK ACKERMAN | |
| - Republican, Businessman / Charity Director | Green, Author / Historian | Republican, State Senator / Attorney | |
| | 22 GAIL K LIGHTFOOT | 46 DIANE BEALL TEMPLIN | |
| 4 KILLINHOLD GULKE | Libertarian, Retired Registered Nurse | American Independent, Attorney / Businesswoman | |
| - Farmer | 23 EDWARD C NOONAN | 47 | |
| 5 GRAY DAVIS | American Independent, Businessman | Write-In: | |
| Democratic, Governor of the State of California | 24 LOUISE MARIE ALLISON | 48 Skp Contest | |
| | 25 | United States Representative District 5 | |
| 6 IRIS ADAMS | Write-In: | Vote for 1 | |
| m INatural Law, Dusiness Analyst | 26 Skip Contest | 10 POREPT T MATSIII | |
| 7 | | 249 ROBERT T MATSOT | |
| Write-In: | Controller | 50 RICHARD FRANKHUIZEN | |
| | Vote for 1 | Republican, Engineer / Consultant | |
| 8 Skip Contest | 27 LAURA WELLS | 51 TIMOTHY E ROLOFF | |
| | Green, Financial Systems Consultant | Libertarian, Computer Scientist | |
| * Lieutenant Governor | 28 TOM MC CLINTOCK | 52 | |
| Vote for 1 | Republican, California State Senator | Write-In: | |
| · KALFF PRZYBYLAK | 29 ERINEST F VANCE | 53 Skip Contest | |
| - Natural Law, Public Relations Director | 20 ICARLOS ACUIRRE | State Senator District 6 | |
| 10 CRUZ M BUSTAMANTE | Natural Law. Entrepreneur / Businessman | Vote for 1 | |
| . Democratic, Lieutenant Governor | 31 STEVE WESTLY | SA DEBORAH ORTIZ | |
| II JIM KING | Democratic, Businessman / Educator | Demogratic State Senator | |
| American Independent, Real Estate Broker | 32 | 55 JASON A SEWELL | |
| 12 DONNA J WARREN | Write-In: | Libertarian, Small Business Owner | |
| Green, Centitled Financial Manager | 33 Skip Contest | 56 | |
| I hertarian Ferret Legalization Coordinator | | Write-In: | |
| 14 PAUL JERRY HANNOSH | Treasurer Victo for 1 | 57 Skip Contest | |
| φ Reform, Educator / Businessman | YOR IOF I | Transfer Lands - Dill C | |
| 15 BRUCE MC PHERSON | 34 GREG CONLON | r or Associate Justice of the Supreme | |
| Republican, California State Senator | 25 MARIAN SMITHSON | Court 2120 | ź |
| - 16 | Libertarian, West Covina City Treasurer | Vote Ior I Shall Associate Indice CARLOS R MORENO be | 0 |
| Write-In: | 36 JEANNE-MARIE ROSENMEIER | elected to the office for the term provided by law? | - |
| | | | • |
| Page 1 Sec 1 1/3 At 0.7" Ln 1 Col 1 REC | TRK EXT OVR WPH | | |

OPTICAL VOTE-TRAKKER[™] ballots can be printed on demand. Multiple pages can be used on standard paper sizes of 11 inch, 14 inch or 17 inch length.

OPTICAL VOTE-TRAKKER[™] automatically recognizes the ballot styles, page number, and orientation of the ballots being read. This mechanism eliminates the need to pre-sort the ballots. Its saves many staff-hours and eliminates all human errors.









VOTE-TRAKKERTM SYSTEM ARCHITECTURE AND OVERVIEW

(Rev. 12-19-03)